The Federation of American Scientists (FAS) is a catalytic, non-partisan, and nonprofit organization committed to using science and technology to benefit humanity through policy agenda-setting and delivering on the promise of equitable and impactful policy. FAS believes that society benefits from a federal government that harnesses science, technology, and innovation to meet ambitious policy goals and deliver impact to the public. I am writing today in my capacity as Director of Entrepreneurship and Ecosystems at FAS, to provide information on how to structure a Recompete program that will accelerate disinvested regions across the U.S. into globally competitive leaders in the industries of the future.

Recompete will help strengthen the region and U.S. economic and national security, but most importantly, they should provide opportunities for inclusive community planning around a central vision of the economic future a given place aims to pursue. Planning that is inclusive and seeks buy-in from the start from a wide range of stakeholders will create lasting durable coalitions, and is indispensable to creating a successful tech hub. Persistent and sticky coalitions
are not the sole determinant of a potential Recompete awardees’ success, but given the breadth of innovation ecosystem stakeholders which must be convened and consulted by any such effort, we believe strong coalitions and broad engagement to be the primary early indicator.

Specifically, my comments today will provide information on: 1) a model for understanding innovation ecosystems and their success or failure; 2) the characteristics of a Recompete-eligible community; 3) program design recommendations; 4) program administration recommendations (specifically, thoughts on measuring progress and success); and 5) brief thoughts on leveraging resources and support across the pool of applicants. First, we introduce a model for understanding and assessment of Recompete coalitions and offer preliminary thoughts on how this model might inform the evaluation of innovation ecosystems’ growth and development. Our recommendations for tech hub characteristics focus on outlining the ways that program eligibility and selection criteria might be designed to assess the capacity of each of the identified stakeholder groups in a given area. Our recommendations for program design focus on promoting activities that make up the “connective tissue” between each of those groups. Finally, our recommendations for other funding and resources highlight ways to crowd in further support for these activities within potential Recompete awardees.

**Section 1: A Model for Understanding and Assessment of Innovation Ecosystems**

I will explain my recommendations in the context of a specific model of innovation ecosystems. This model, which I have adapted from whitepapers written by MIT entrepreneurship researchers Fiona Murray and Phil Budden, is built on two key academic concepts, and is reinforced through my many years of practice as an entrepreneur, ecosystem builder, and philanthropic funder of inclusive entrepreneurial ecosystems.

When it comes to judging the potential for success in developing innovation ecosystems, the model below is a tool that can be used to summarize the **two key criteria that should be used to describe success: 1) breadth of engagement, and 2) evidence of trust and alignment across the ecosystem**. Innovation ecosystems must engage and align these six key stakeholder groups:

- **Entrepreneurs** - Those who have started and are working to start new companies, including informal entrepreneurs, sole proprietors, small businesses, tech startups, university researchers considering or pursuing tech transfer, deep tech startups, manufacturing firms, service firms, and the non-profit organizations that convene them and represent their voices.
- **Government** - Public entities of all levels and branches, including, local, state, and federal government agencies and officials, as well as pseudo-governmental organizations and public-private partnerships (including some economic development organizations).

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- Corporations - Large and established companies in a region that are relevant in their capacity as major employers, large-scale purchasers, pilot customers, sponsors of research and potential strategic investors and acquirers of technology and innovation-driven companies. Corporations might also act in the classical definition of cluster development, providing fractional access to advanced equipment or capabilities that the scale of their capex facilitates, to improve access to such facilities for smaller or newer companies with fewer assets to fund such investments.

- Workforce Development - The programs and capabilities in a community that produce a base of employees with the specific skills and competencies to support both growing and established companies, including K-12 systems and districts, educators, non-degree credential programs, professional training programs or job pipelines, skills-based development communities and meetups, regional workforce partnerships, community colleges, and colleges and universities of all kinds.

- Capital - Providers of private capital that supports the creation of commercial value in exchange for a return on investment, including venture capital, angel investors, angel networks, traditional private equity investors, limited partners or institutional investors, as well as community banks, CDFIs, CDCs, other non-bank loan funds, fintechs, and providers of alternative financing such as factoring or revenue/royalty-based financing.

- Research Institutions - Organizations which conduct the basic and applied research from which deep tech businesses might be formed and begin the process of commercializing that research, including research universities and affiliated centers and institutes, research and teaching hospitals, private research institutions (such as the Stowers Institute or Danforth Plant Science Center), national labs, FFRDCs, and Focused Research Organizations.

![Figure 1](image-url)
In the context of regional, place-based innovation clusters (including Recompete grantees), this stakeholder model is a tool that can help a burgeoning coalition both assess the quality and capacity of their ecosystem in relation to a specific technology area or provide a guide to prompt broad convening activities. From the standpoint of a government funder of innovation ecosystems, this model can be used as a foundation for conducting due diligence on the breadth and engagement of emerging coalitions. It can also be used to help articulate the shortcomings of a given community’s engagements, to highlight ecosystem strengths and weaknesses, and to design support and communities of practice that convene stakeholder groups across communities.

Innovation ecosystems are complex, adaptive systems. They are complex because they are composed of not just six people or six organizations, but six systems with their own challenges, focuses, and dysfunctions. They are adaptive because these six systems work in ways that are interconnected and create reinforcing or balancing feedback loops—that is to say that a small change in the actions of one stakeholder can resonate within their own system, and throughout the larger ecosystem to create much larger effects that compound over time, or in a different context, that same small change can produce no effect at all on outcomes. Adaptive systems are difficult to model and predict, and sometimes even difficult to describe. This is precisely why the evaluation of innovation ecosystem efforts is difficult to standardize and outcomes are nearly impossible to predict.

Concerted efforts to change the conditions of a given innovation ecosystem must be grounded in a collective impact approach if they hope to succeed. Collective impact models require the ongoing convening and building of trust among ecosystem stakeholders. This relational foundation allows collective impact efforts to align a broad group of stakeholders around a shared vision, priorities, plan for execution, and metrics for impact. This process of identification, convening, trust-building and alignment is slow. That is why efforts to build innovation ecosystems (such as those funded by the Recompete program) must operate on a much longer and more sustained timeline than any one grant application to be successful.

The selection criteria for the Recompete program should be grounded in an understanding that progress happens at the speed of trust—not at the speed of federal grant application periods. Communities that have a long track record of convening broadly and working to build trust and alignment among stakeholders are best positioned for success in building entrepreneurial ecosystems. Activities like previous programmatic partnerships, ongoing coalition meetings, existing shared governance structures, or efforts to collect shared impact data are examples of activities that might indicate ongoing collective impact efforts, and therefore, indicate high levels of trust among coalition partners.

Section 2: Characteristics of a Recompete Community
For those who live or work in areas with high prime-age employment gaps, what barriers should be addressed to increase job placement/retention and/or job creation? What unique challenges and opportunities do you see in your community?

It is very common for cities that undertake efforts to build their innovation ecosystems to choose which clusters they will pursue among a relatively small, private group of collaborators such as the Board of a Chamber of Commerce. Some communities that seek to be data-informed might engage in analysis, but that typically occurs in analyzing a finite menu of options (e.g. should Omaha build a biotech hub or an ag tech hub?). Very seldom does the community sense-making process which leads to cluster selection include the voices of those who are impacted by innovation. This aspect of community engagement is often missing from innovation cluster decision-making, and naturally leads to unforeseen barriers to job placement and job creation down the line. After all, who better to vet a job creation plan than the people who might hold the jobs?

For instance, while a community might seek to build an ag tech hub for its potential to create economic growth on paper, a community input session might reveal a mismatch in the skills needed to repurpose a process manufacturing workforce to produce consumer packaged goods. It may surface the fact that many in the community don’t see agricultural jobs as desirable. More importantly, community input may reveal the fact that many in the community associate civic-led efforts to spur economic development with the historic efforts that dispossessed their families of the agricultural land they once owned through eminent domain. This was the case in Kansas City, my hometown, when we held community listening sessions to assess our own cluster strategy. These listening sessions led us to a dramatically different choice of cluster focus: biologic medicines.

Cluster selection is just the first aspect of cluster development in which a community experiencing high prime-age employment gaps might fail to be adequately inclusive. After the selection is made, ensuring that the voice of people systemically left behind is included throughout the stakeholder model is equally important. In this way, Recompete should not think of eligibility in terms of programmatic focus (e.g. we want communities to propose certain types of programs like X), but in terms of adequate inclusion of voices systematically omitted from these conversations.

How might EDA determine how large of an investment is necessary to meaningfully advance the economy of a local labor market or community with a high prime-age employment gap? What data and information are important to that determination?

There is no situation in which this program alone can solve the systemic problems that communities experiencing high prime-age employment gaps face. As a result, no budget the EDA could allocate to this program would ever be enough. As a result, the EDA should set a
funding limit based on the number of communities it wishes to fund, and prioritize providing clarity to applicants on what program budgets might be.

When it comes to funding outreach and broad engagement, Recompete should fund the kind of work that it is most difficult to fund and therefore to do—convening and outreach. Recompete should recognize that this work is foundational to the development of inclusive innovation ecosystems and fully fund these capabilities without requiring matching funds. It might fund dedicated personnel, regular convening activities of stakeholders or other interest groups, and public communication and engagement campaigns, including large-scale events. Recompete might also fund capabilities that allow Recompete coalitions to sponsor the activities of groups in the community or facilitate partnership-building and collaboration. Finally, Recompete might use this as a justification to support major investments in space or facilities that allow for convening, regular meeting, or engagement with the community at-large.

When it comes to providing catalyzing funding for the development of new innovation assets, Recompete funding should be structured as a first-mover. New innovation assets needed to support ecosystem growth might include the construction of training facilities, the creation of new governance structures, or the expansion of a local community college’s ability to conduct targeted outreach. These are all expensive undertakings and to ensure that they are sustainable community assets, local support for their development and maintenance is critical. Still, communities that do not have ready access to capital have traditionally struggled to provide the up-front match required in other EDA programs. Instead, Recompete should not require a match, but should instead structure outputs and outcomes in the grant related to raising leveraged funding over time. This will allow the Recompete capital to be truly catalytic in its impact, and allow teams time to build support for their work more broadly among funders.

*If implementation awards were limited to the statutory minimum of $20 million, what types of initial investments would most significantly increase employment rates?*

The greatest impact that a $20 million Recompete grant could have is to ensure that the voices of those systematically excluded are heard in the early stages of the cluster planning process, and that inclusion continues into long-term governance and management of cluster development efforts. For that reason, the first iteration of Recompete should focus on funding planning, assessment, and governance structures that will lead to future engagement with programs like Tech Hubs. There is nothing that makes it easier for cash-strapped and under-funded organizations to cooperate than a sense of abundance. As a result, Recompete should consider primarily funding staff time for organizations representing disinvested communities to participate in economic development and cluster planning activities, and to engage their communities broadly in those conversations through services, convening, and outreach.
What scale and types of economic development interventions would be most likely to advance the economy of a locality or region with a high prime-age employment gap? For example, should the program emphasize industry sectors or be sector agnostic?

The Recompete program should prioritize alignment with the Biden Administration’s plan for greater technological competitiveness, authorized in the CHIPS and Science Act. It should then allow communities to choose their emphasis, and should not limit communities from choosing any industry that is set forth in the competitiveness plan. Inclusion is a manner of behaving, and if all groups represented in the stakeholder model behave inclusively, any industry could have the potential to create good and promising jobs.

Answers to the questions “what city is best for X industry?” (and vice versa) or “what are defining features of a successful Recompete awardee?” must be grounded in a methodology that extends beyond traditional asset mapping or the lagging indicators traditionally used to describe economic development (such as location quotient or industry employment). We argue that an inclusive stakeholder asset capacity analysis which includes comparative insights and is broken down by industry offers the most accurate assessment of a given region’s potential and metrics for success. However, this analysis takes time and community input to develop. As a result, the first iteration of Recompete should provide planning and governance support that will allow awardees to conduct these analyses and make sense of them with community input.

Are there limitations due to what's currently allowable with EDA funding?
As the Recompete program is designed, there are two characteristics of past EDA programs that we advise should be abandoned: requiring matching funds, and partial funding of applications. The matching funds requirement is inequitable and penalizes organizations led by people of color, which raise less philanthropic and corporate funding than white-led organizations^2, as well as coalitions in rural areas. Removing the matching funds requirement does not necessarily mean that leverage can’t be measured, just that it is not a qualifying criteria for an application. Coalitions should be asked to measure and report on leveraged funding, including non-traditional and pro-bono support, as they measure the impact of their work.

Additionally, Recompete should not plan to partially fund community applications under any circumstances. Given the importance of trust-building in a collective impact model like ecosystem building, care is often taken by applicant coalitions to ensure that organizations across the community are represented in their plans. This can help ensure the coalition’s long-term success as a wide group of organizations feel a sense of ownership over the group’s plan. They are also often carefully negotiated and politically calculated agreements, calibrated to “preserve the peace” among coalition partners. Application reviewers cannot possibly understand the community-level impact of choosing to fund some parts of an application and tossing out others.

https://nff.org/2022-survey-focus-racial-equity
As a result, knowing that those decisions can have far-reaching ramifications, Recompete should make funding decisions about applications as a whole, not excise specific projects within submitted applications.

*Given that each eligible community will bring its own unique set of challenges and opportunities, how should EDA evaluate whether any such investments, interventions, and/or policies would be most effective in an eligible community?*

Any investment, if it is not designed with broad and inclusive input, will have a limited potential to be effective. The initial and qualifying criteria for a Recompeted awardee should be that any application represents the work of multiple organizations in an existing coalition—not just one. The program should assess the breadth of inclusive engagement across the stakeholder model as a foundational indicator of a coalition that can be effective in delivering a broad range of solutions.

*What economic development assets are most predictive of long-term success from a Recompete intervention?*

There is no one asset that can or should be listed that can set community efforts apart. Instead, it is the capacity of an asset in a community, and the degree to which it can work well within an inclusive and collaborative coalition that should set community efforts apart. For example, another organization might say that a community college is a critical partner. If that community college has no track record of engagement with innovation ecosystem development efforts, it is unlikely that it will become highly collaborative and build trusting relationships with the necessary community partners overnight. A more detailed analysis of such a community college might reveal that many of the programs that they claim as successful train participants for low-wage jobs with limited growth opportunities, or are irrelevant to the region’s cluster development work. Existing relationships and assets’ capacity are critical areas of assessment because they are the difference between looking good on paper and being effective partners.

*What economic development assets does a local labor market and/or community need to have to take advantage of the Recompete Pilot Program?*

As above, it is not the mix of assets, but their aligned capacity and track record of engagement and collaboration that are most important to assess.

**Section 3: Recompete Program Design**

*How can federal grants and cooperative agreements be structured to ensure the impacts of the Recompete Pilot Program are shared broadly and equitably?*

For federal grants to be structured equitably, it requires first that they go to coalitions that work together equitably. This is demonstrated best by existing, trusting partnerships. Indicators in an application budget might include things like staff and indirect costs for sub-granting organizations being included in the PI budget as subgrants or contract. It might also include some
line items for organizations that do not otherwise have financial incentive to participate in the coalitions work receiving funding to compensate for their staff time spent on coalition-aligned work, or honoraria for those who choose to participate in community listening sessions.

The statute permits implementation investments only in areas with an approved Recompete Plan. What elements should Recompete Plans include, and against what criteria should EDA evaluate them?

The idea that Recompete plans should be completed and approved before any grant can be given is inequitable and will negatively impact the program’s outcomes. In essence, the Recompete program should be structured in such a way that community funding is provided for the initial plan creation process. Otherwise, it is likely that the plans themselves will not create opportunities for equitable or inclusive community engagement, which is foundational to the program’s success.

What should EDA consider in designing the program for its current funding level of $200 million given the $1 billion vision in the program's statutory authorization? How should those considerations affect EDA's design of the program now and potentially into future years? The EDA should anticipate that the program’s funding will grow gradually, as it has for programs like the Regional Innovation Strategies funding in the past. As such, the initial Recompete program should concentrate on helping communities design their Recompete plans in ways that are inclusive and will produce equitable outcomes. In the future, the program may choose to coordinate with Tech Hubs to help these community efforts grow and advance, or consider a dual-track program that adds on programmatic funding in communities that have previously received planning funds.

Section 4: Recompete Program Administration

What types of administrative or technical assistance will help the recipients of Recompete funding to be more successful during implementation?

Technical assistance related to planning will be critical in early rounds of the Recompete program. In addition, Recompete could choose to integrate aspects of the FAS Phase 0 Program to help communities engage broadly and inclusively as they make sense of cluster-relevant data as described below. Initial assessment of stakeholder capacity should be discussed and viewed widely in a community to make cluster selection decisions.

How should EDA measure the success of the Recompete Pilot Program?

As the Recompete program defines and prepares to measure its success in developing innovation ecosystems, it should be focused on capturing the specific ways in which innovation ecosystems and the capacities of the stakeholders within them are changing over time. It should be less focused on measuring economic development outputs and outcomes as an indication of success or failure during the grant period. It should not ask applicants to predict the
long-term economic outcomes that their work will produce nor should it ask them to report on economic outcomes relative to a prediction. This is a fruitless forecasting exercise that not even the finest economists can reliably produce. While economic outcomes should be collected as one kind of descriptive data to help measure the impact that Recompute might have, the team should be careful not to frame these as critical measures of success—instead, success should be judged in terms of expanded engagement, and expanded stakeholder innovation capacity.

Analysis should primarily focus on the capacity of stakeholders in those places, as the example metrics provided below:

- **Entrepreneurs** - What is the specific nature of firm formation, startup success, and small business growth potential in the proposed industry cluster, and what makes the entrepreneurs of this region particularly well-suited to build the cluster at hand?
  - Penetration of entrepreneur support programs: percentage of firms in a metro area served by entrepreneur support organizations.
  - Presence or past success of particularly novel or successful entrepreneur support programs with significant potential to develop startups or small businesses relevant to the cluster and its supply chains.
  - Industry specific value growth: aggregate valuation growth of startups by industry, via Crunchbase or Pitchbook.
  - Measurements that indicate the specific, industry-relevant capacity of small businesses: such as a high concentration of a specific, relevant type of manufacturing firm or service provider, relative to other places. For example, Kansas City’s large concentration of contract research organizations and small-run process manufacturing firms have the potential to support a biologics cluster.
  - Industry specific entrepreneurship efficiency index: e.g. breakdowns of data like the [Startup Cartography project](https://www.startupcartography.com/), which indicate which new firms are most likely to develop IP and experience venture-backable growth in the future.

- **Government** - How aligned are governments in the region around pursuit of this cluster idea? What is the nature of the resources that they provide to sustainably develop this ecosystem and stakeholders within it?
  - Active capital pools supported by other state and federal programs: E.g. SBA loans, SSBCI, state-funded ventures, and any specialized programs designed to help startups or small businesses in this cluster access capital.
  - Sustained presence of innovation-aligned incentives relevant to the proposed cluster such as angel investment tax credits or CDFI tax credits in the region.
  - Ongoing/sustaining funding commitments to support cluster activities or stakeholders activities relevant to it, such as sustained funding for entrepreneurship support organizations or funding for a public-private partnership.
Regional economic planning alignment or the degree to which diffusion of industry-specific focus into local economic development plans like CEDS or “Topeka 2040” plans has occurred.

Evidence of ongoing, traditional economic development activities designed to support the growth of the cluster, such as business or talent attraction efforts designed to support the growth of the proposed cluster.

Corporations - How are major employers and established businesses in the region relevant to efforts to build this cluster? What connections exist to relevant corporate partners outside the region that can help advance this cluster’s development?

Corporate health assessment: including relative size-market share/profitability of publicly traded companies in the region compared to others in similar industries.

Strategic investment activity: including indicators of strategic investments and acquisitions in the industry made by local corporates or non-local companies with significant local ties, sufficient to indicate a pipeline of opportunities.

Innovation value assessment including the total value of all patents and goodwill of publicly available financial statements, as an indicator of corporate willingness to pursue strategic acquisition activity, or presence of a corporate culture that values innovation.

Ongoing, locally-targeted engagement efforts relevant to the cluster, such as commitments to purchase goods or services from local small business vendors, pilot/first customer programs, or corporate accelerators with a track record of serving local companies.

Workforce development

Percentage of PhD graduates by discipline aligned with specific industry focus, and the degree to which they stay in the region or flow elsewhere.

Presence, speed to launch, or unique ability to create new classes and degree programs within regional universities and community colleges of all types.

Presence and seats in non-degree certificates and training programs relevant to the cluster industry or specific skills needed.

Indicators of ongoing industry-workforce engagement relevant to the industry, or a specific, demonstrated ability to create nimble, responsive workforce training programs.

Ongoing engagement efforts with established organizations like Workforce Innovation and Opportunity Act (WIOA) partners and/or workforce partnerships to provide specific and targeted support to businesses relevant to the cluster.

Risk Capital

Industry-specific venture capital attraction: reporting on startup rounds raised over time and corresponding increases in aggregate startup valuation categorized by industry.
○ **External vs. local venture funding ratio**: descriptive measures of how much startup funding comes from local vs. non-local sources, as a means of understanding the dynamics of a local venture capital and angel investment ecosystem.

○ **Volume of alternative financing deals**: measures to indicate debt/alternative financing needs are met.

○ **Volume of debt financing relative to need**: active capital pools deployed in the form of small business and microloans relative to estimated aggregate demand for capital.

○ **Access to existing capital products**: estimates of the volume of federally-funded, managed, or guaranteed capital products across programs and agencies, like SBA 504 and 7a loans, SSBCI funds, and USDA loans, controlled for population.

- **Research Institutions**
  ○ **Research classification**: text analysis and classification of abstracts of peer-reviewed publications at regional research institutions to help understand the volume and nature of research happening at institutions in the region.
  ○ **Research quality**: the number of citations pieces of research have secured from other papers published in peer-reviewed journals, which can be helpful in the aggregate (to answer the question, what is the best research we are producing?) or at the individual level (to understand which research institutions or even labs are producing the highest-quality, most relevant research).
  ○ **Tech transfer flows**: understanding the percentage of university tech transfer licenses granted to companies less than 5 years old vs larger or more established companies.

Finally, **all categories measuring people should be regularly disaggregated on the basis of race and ethnicity, gender, and nativity**. This is critically important because ensuring that innovation ecosystems are inclusive and produce equitable outcomes requires that we understand exactly who is and isn’t being served, as well as how those dynamics change over time.

The list above provides examples that are illustrative of what it looks like to analyze the capacity of assets in a stakeholder ecosystem, though they are not exhaustive. While it is probably unreasonable to assume that many cities are already thinking along these lines, the Recompete assessment criteria and application question should be designed, in addition to providing descriptive information about proposed activities, to help draw out the insights above so that reviewers and program managers can judge a) whether communities understand what assets they have and the strengths and gaps in their capacity, and b) how well activities proposed align with opportunities to strengthen those assets and more broadly engage with un- or under-represented stakeholders.
a. What would be the indications of a successful implementation investment under the Recompete Pilot Program?

Under the model described above, successful implementation of a recompete program would be evidenced by indicators showing the breadth of engagement in a planning process, and indicators of community alignment with that plan (e.g. community organizations reflecting those priorities in their strategic plan). At a stage when Recompete funding represents programmatic interests, its success should be judged by how effectively it helps grow community capacity within an innovation ecosystem–especially as it relates to the workforce development stakeholder group (e.g. an increase of the number of seats and the fill rate of those seats in workforce training programs related to the region’s cluster, as well as those programs’ placement outcomes like placement rate and salary).

17. How can the Recompete Pilot Program best complement and leverage other Federal, State, and local economic development investments (e.g., HUD’s Community Development Block Grant program, American Rescue Plan Act, Bipartisan Infrastructure Law, Inflation Reduction Act, CHIPS and Science Act, etc.) so that persistent economic distress is alleviated successfully?

As one of few federal cluster development programs with a long-term authorization, the Recompete program should prioritize criteria that allow it to be flexible, filling gaps in federal funding for innovation ecosystem development activities and adjusting to accommodate the creation and sunset of one-time industry-specific programs, purpose-built to seed innovation ecosystem development in specific sectors. Recompete staff should look for community proposals that articulate the gaps in their ecosystem outreach, assets, or stakeholder connections and fund applications that articulate those gaps, whether or not federal funding is already at the table. They should not just pursue the leverage of other government funding by doubling down on clusters funded by other agency and federal programs as a path to “agency collaboration.”

That being said, funding from other federal programs relevant to innovation ecosystem building can indicate some of the underlying conditions important to Recompete success—namely, the presence of ongoing coalition activity. They can also be useful as a means of “auditing” the stakeholder analysis and gaps articulated by applicants. For instance, if a community articulates a need to improve SBIR attainment as a gap in their research institutions’ capacity, Recompete reviewers and staff could ask whether that state is an EPSCOR state or has an existing SBA FAST award, and then assess whether or not the recipient of that FAST award seems to be a meaningful partner in the coalitions’ application. Lack of that group’s involvement in the coalition without explanation could indicate that the coalition is struggling to fully engage
research institutions in their work. That might serve as a point of focus if that application is funded.

Similarly, applicants who have been Build Back Better Regional Challenge semi finalists or have received Engines Type 1 funding might be more likely to have ongoing, rich coalition efforts. Below are federal programs that might offer particularly good opportunities for to better understand communities’ ongoing work in this regard:

- Small Business Administration: Small Business Innovation Research Program (SBIR), Regional Innovation Clusters, Growth Accelerator Fund Competition
- NSF: Regional Innovation Engines, EPIIC, EPSCOR
- Treasury: State Small Business Credit Initiative
- NIST: Manufacturing Extension Partnership, Manufacturing USA Institutes
- Department of Energy: Clean Energy Demonstrations on Current and Former Mine Land, Regional Direct Air Capture Hubs, Regional Clean Hydrogen Hubs, Office of Clean Energy Demonstrations
- Department of Defense: Defense Manufacturing Community Support Program
- Misc: Southern Crescent Regional Commission

18. What is a realistic time period (e.g., 5, 10, 15 years, other?) over which to evaluate the economic development impacts of the Recompete Pilot Program and why?

The economic development impacts of the program should be assessed over the longest possible politically viable timeline (at least 10 years). Likewise, it is also important that grantees are not asked to produce economic outcomes on a short-term (3-5 year) basis. This is not to say that the issues facing these communities and their need for job creation are not urgent. It is simply a statement that reporting requirements for economic outputs on a 2-3 year timeline are both pointless and often incorrect. Instead, when measuring the progress of coalitions, program staff should concentrate on outputs and short-term outcomes that reflect growth of a community’s innovation ecosystem capacity (esp. workforce development capacity), and leave the studies of economic impact to evaluators.

**Section 5: The question you didn’t ask—leveraging outside support across the portfolio of Recompete awardees**

Recompete is the latest in a string of government investments that are making a strong statement that cluster development and innovation ecosystems are the future of economic development. As a result, many corporate and philanthropic partners are paying attention to the investments made by the federal government, with a desire to engage across the full portfolio of awardees. Aligned with their Regional Innovation Engines program, the NSF TIP directorate recognized this change and has taken steps to create support capacity, in the form of the “Engines Builder Platform” that is designed to leverage these emerging opportunities across the full network of awardees. Certainly, Recompete could learn from this example. Better yet, it could seek collaboration with
NSF and its Builder Platform to provide access to the same supports for participants in the Recompete program.

As someone who has spent my entire career doing, studying, and funding ecosystem building work, I hope that my extensive comments today show evidence of my passion for this work, and the need for greater standards and frameworks to describe it. What I lack in brevity, I hope to make up for in pragmatic and useful insight. Thank you for the opportunity to provide comments and recommendations to inform this program, and FAS stands ready to assist the EDA in any way possible as it brings this program to life.

Sincerely,

Melissa Roberts Chapman  
Director, Ecosystems and Entrepreneurship  
Federation of American Scientists